

FE-M6-DS

FE-M6-DS 16 Channel Digital Monitor

A 16-channel digital monitor, the M6-DS is ideal for use in any FYLDE enclosure where it will monitor and display the outputs from each installed module.

The monitor will also measure A.C. with its built in precision rectifier scaled for RMS.

A peak hold function completes the display options for time varying signals.

When used with the FYLDE FE-419-CDT or FE-420-CD modules, the FE-M6-DS avoids the need for a separate oscillator. It is particularly recommended as a partner module for these capacitive displacement measurement modules.

A front panel BNC socket enables additional monitoring equipment to be connected.



3 1/2 DIGIT LCD DISPLAY

PEAK HOLD FUNCTION

AC AND DC MONITORING

MONITORS 16 CHANNELS

OSCILLATOR FOR FE-419-CDT and FE-420-CD

SPECIFICATION

The FE-M6-DS is a 16 channel monitor unit, normally used in a FYLDE system to provide a display of each channel's output. The unit allows any of DC, AC rectified average, or peak hold to be selected and displayed for any channel. In addition the unit provides a pair of 16 kHz oscillator outputs which are used with Fylde capacitive displacement measurement modules (FE-419-CDT and FE-420-CDT).

METER	Display	0.3" 3.5 Digit LCD (1999).
	Sample Rate	2.5 readings / second.
	Decimal point	Selectable by on board jumper. (This allows the decimal point to be repositioned or removed if the signals have been scaled to represent mechanical units.)
DC	Scaling	± 19.99 volts dc.
	Accuracy	0.2% ± 1 count @ 20°C.
	Stability	100 ppm / °C.
AC	Measurement type	Precision rectifier.
	Accuracy	$\pm 1\%$ conversion.
	Scaling	RMS (Average responding) 0 - 7.07v (20v pk-pk).
	Frequency Range	20 Hz - 20 kHz 1%
Peak Hold	Display	Peak held digitally on display together with "HOLD" legend.
	Reset	Manual front panel switch.
	Polarity	Positive or Negative peak set by on board jumpers.
	Drop	Internal store of previous peak droops by 1 mV/s. Display of previous peak is held until next peak exceeds internal store of previous peak.
Oscillator	:	Fitted as an option for systems which include FE-419-CDT or FE-420-CD module.
	Frequency	16 kHz standard, (32 kHz special order).
	Level	Variable 5V, 2V, 1V, 0.5V, 0.2V, 0.1V RMS. Two separate outputs with individual level settings.
	Power	Sufficient to power up to 6 channels.
	Distortion	<0.5% harmonic distortion.
	Amplitude Stability	<100 ppm/°C.
Input	Switching	14 fully differential input channels, and two local oscillator signals. When oscillator option is not fitted, the last two positions are available as single ended inputs to provide 16 input channels.
Output	Connector	BNC - Monitoring the selected input signal.
	Output impedance	100 Ω
Mechanical	Width	2 inches.
	Compatible Enclosures	FE-PE4 with two 1 inch modules or one 2 inch module. FE-PE8 with six 1 inch modules.
	Power	Normally 230 V mains. May also be configured as 115 V mains or 12 V DC powered.